Commentary

The study by Zar and colleagues was a well-designed, randomized, controlled trial—the gold standard for evaluating therapeutic methods. It shows that adequate medication delivery for asthma can be achieved with both expensive and inexpensive tools.

Overall, the results have practical implications for asthma guidelines in developing and industrialized countries. Some programs allow replacement of spacers only once every 2 years. Spacers may also be the only alternative for delivering non-nebulized anti-inflammatory medications. Furthermore, spacers can become plugged, torn, broken, or misplaced or can be left at home.

Future studies need to evaluate the use of these devices in younger children, especially in areas where neither spacers nor nebulizers are readily available. This study shows that homemade spacers work in the hospital setting, but will they also work in the home setting? Will differences in priming and washing alter drug delivery?

It is worthy of note that to craft a spacer from a sealed cold drink bottled necessitated using a heated wire, as described in the original article by Zar and colleagues.

1 Pedersen S, Mortensen S. Use of different inhalation devices in children. *Lung* 1990;168(suppl):653-657.